

**Amendments to the Claims:**

Please cancel claim 19. This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A method of modifying a polymeric substrate comprising exposing the polymeric substrate to a flame where the flame is supported by an oxidizer and fuel mixture that includes at least one sulfur-containing compound that functions as a fuel substitute, the sulfur-containing compound comprising hydrogen sulfide or a mecaptan.
2. (Original Claim) The method of claim 1 wherein the mixture of oxidizer and fuel is fuel-lean.
3. (Original Claim) The method of claim 1 wherein the mixture of oxidizer and fuel is fuel-rich.
4. (Original Claim) The method of claim 1 wherein the sulfur-containing compound comprises hydrogen sulfide.
5. (Original Claim) A polymeric substrate having on at least one surface an adhesion-promoting treatment provided by the method of claim 1.
6. (Original Claim) A polymeric substrate treated on at least one surface by the method of claim 1 and having a metal layer adhered to the treated surface.
7. (Original Claim) A polymeric substrate having a surface treatment comprising a surface that comprises at least one oxidized sulfur-containing chemical group and at least one nitrogen-containing chemical group from the group consisting of nitroso and nitrosoamine.

8. (Original Claim) The polymeric substrate of claim 7 wherein the oxidized sulfur-containing chemical group is a sulfate, a sulfone, a sulfonate, or a sulfonic acid.

9. (Original Claim) A polymeric substrate having a treated surface comprising a surface that comprises at least one oxidized sulfur-containing chemical group and at least one unoxidized sulfur-containing chemical group.

10. (Original Claim) The polymeric substrate of claim 9 wherein the oxidized sulfur-containing chemical group comprises a sulfate, a sulfone, a sulfonate, or a sulfonic acid.

11. (Original Claim) The polymeric substrate of claim 9 wherein the unoxidized sulfur-containing chemical group comprises a sulfide or a thiol.

12. (Original Claim) A polymeric substrate having an adhesion-promoting treatment comprising oxidized and unoxidized sulfur-containing groups on at least one surface, and a metal layer adhered to that surface.

13. (Previously Presented) A method of modifying a polymeric substrate comprising exposing the polymeric substrate to a flame where the flame is supported by an oxidizer and fuel mixture that includes at least one sulfur-containing compound that is a gas at room temperature and pressure and functions as a fuel substitute.

14. (Previously Presented) The method of claim 13 wherein the mixture of oxidizer and fuel is fuel-lean.

15. (Previously Presented) The method of claim 13 wherein the mixture of oxidizer and fuel is fuel-rich.

16. (Previously Presented) The method of claim 13 wherein the sulfur-containing compound comprises hydrogen sulfide.

17. (Previously Presented) A polymeric substrate having on at least one surface an adhesion-promoting treatment provided by the method of claim 13.

18. (Previously Presented) A polymeric substrate treated on at least one surface by the method of claim 13 and having a metal layer adhered to the treated surface.